Task 464 FY 98 EOD / LIC PROGRAM CANDIDATE PROJECT SUMMARY SOF Global Remote Initiator Device (SOF GRID)

SPECIFIC TECHNICAL / OPERATIONAL NEED:

The current Army Remote Firing Device, the MK-122, provides a very short effective operating range and is extremely terrain dependent (Line of sight only). In addition, the MK-122 is being phased out of the Army system and is planned to be replaced with a similar "limited range" system. An enhanced performance initiation device is required which will provide the SOF operator with the capability to remotely activate any electrical or electronic device such as IR target markers, blasting caps, sensor arrays, etc..., placed anywhere in the world from anywhere else in the world.

This operational need is supported by the USSOCOM Requirements Review Board's Technology Development Objectives: #2 (Miniaturization & Weight Reduction Technologies); #6 (Passive shallow water / terrestrial mine, explosive and boobytrap detection and neutralization equipment and systems); #7 (Target Locating, Tracking and Marking Technologies); #8 (Enhanced Explosive Charges and Munitions); and #9 (Advanced vision devices, sensors, fire controls for SOF weapons, and human sensory enhancement equipment).

PROPOSED TECHNICAL APPROACH:

The SOF grid will be developed in two steps. It will utilize commercial pager systems. Currently, these systems are limited to urban areas only; within line of sight of a ground based antennae. The first system will be based on a modified NDI pager which will receive a coded transmission (or transmissions) to initiate a firing train. This system will work in urban areas. It is anticipated that commercial paging will be truly world wide in the next two to three years. At that time, the system would be modified as necessary to work with the new technology. A commercial device will be modified with the addition of firing circuitry and a safe and arm device to provide a cigarette package sized initiator that will greatly increase SOF capability.

EXISTING CAPABILITY:

Currently there are no readily available remote detonators that have true long distance capability.

POTENTIAL PERFORMER (GOVERNMENT):

POTENTIAL PERFORMER (CONTRACTOR):